ALTOS® Gel-Free, Double-Jacket, Single-Armored Cables, 12-288 Fibers

CORNING

Features and Benefits

Gel-free waterblocking technology
Craft-friendly cable preparation

Corrugated steel tape armor
Provides rodent resistance for direct-buried applications

Flexible, craft-friendly buffer tubes
Facilitate easy routing in closures

SZ-stranded, loose tube design
Isolates fibers from installation and environmental rigors and facilitates mid-span access

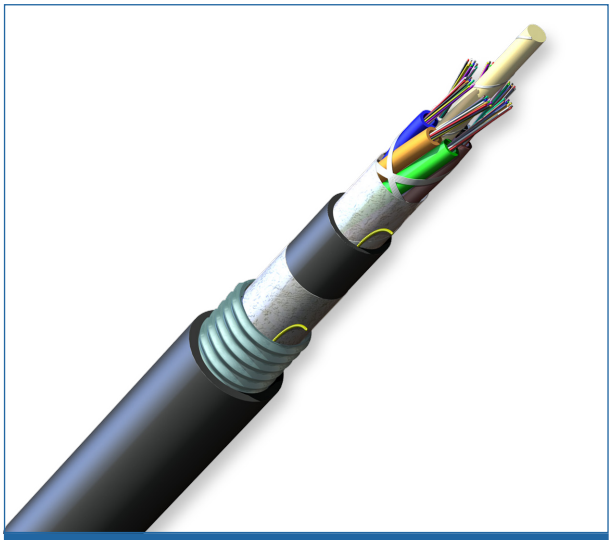
Dielectric central strength member
No preferential bend and requires no bonding or grounding

Medium-density polyethylene jacket
Makes cable rugged and durable while being flexible and easy to strip

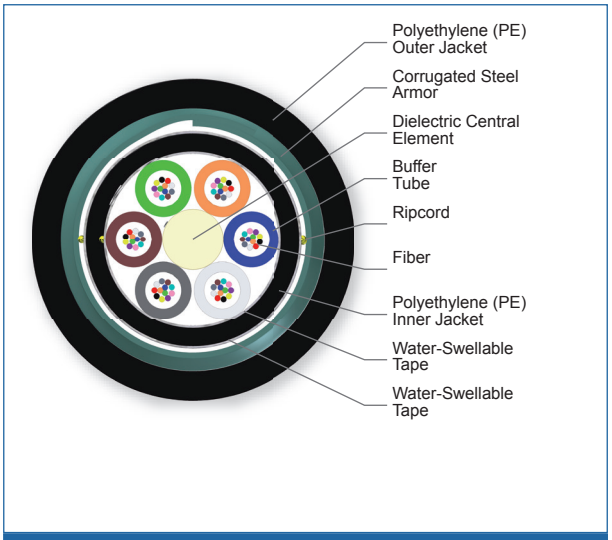
ALTOS® gel-free, double-jacket, single-armored cables are rugged, armored cables designed for direct-buried installation while suitable for duct and aerial (lashed) installation. The loose tube design provides stable performance over a wide temperature range and is compatible with any telecommunications-grade optical fiber.

Standards

Design and Test Criteria	ANSI/ICEA S-87-640 Telcordia GR-20 RDUP PE-90



ALTOS Gel-Free, Double-Jacket, Single-Armored Cables, 72 Fibers | Photo PIM0541



ALTOS Gel-Free, Double-Jacket, Single-Armored Cables, 72 Fibers | Photo PIM1440

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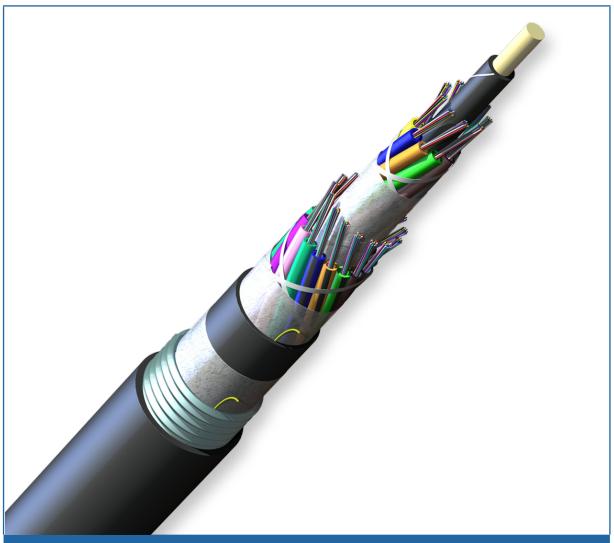
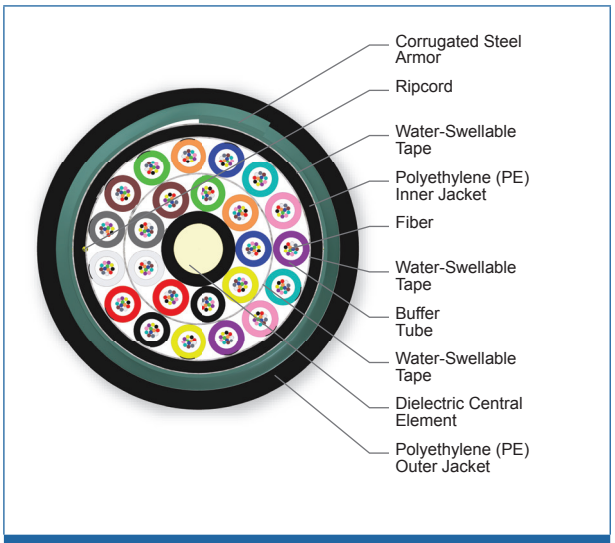


ALTOS Gel-Free, Double-Jacket, Single-Armored Cables, 288 Fibers | Photo PIM0546



ALTOS Gel-Free, Double-Jacket, Single-Armored Cables, 288 Fibers | Photo PIM1445

Specifications

Temperature Range	
Storage	-40 °C to 70 °C (-40 °F to 158 °F)
Installation	-30 °C to 70 °C (-22 °F to 158 °F)
Operation	-40 °C to 70 °C (-40 °F to 158 °F)

** Note: Corning recommends storing cable in a proper temperature environment prior to installation to allow the cable temperature to meet installation temperature range specifications for best installation results.*

Max. Tensile Strength, Short-Term	2700 N (600 lbf)
Max. Tensile Strength, Long-Term	890 N (200 lbf)

Mechanical Characteristics Cable						
Fiber Count	Number of Tube Positions	Number of Active Tubes	Weight	Nominal Outer Diameter	Min. Bend Radius Installation	Min. Bend Radius Operation
12 - 72	6	1 - 6	179 kg/km (120 lb/1000 ft)	14.3 mm (0.56 in)	215 mm (8.4 in)	143 mm (5.6 in)
96	8	8	219 kg/km (147 lb/1000 ft)	16 mm (0.63 in)	240 mm (9.4 in)	160 mm (6.3 in)
144	12	12	318 kg/km (213 lb/1000 ft)	19.7 mm (0.78 in)	296 mm (11.6 in)	197 mm (7.8 in)

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Mechanical Characteristics Cable						
Fiber Count	Number of Tube Positions	Number of Active Tubes	Weight	Nominal Outer Diameter	Min. Bend Radius Instal-lation	Min. Bend Radius Ope-ration
192 - 216	18	16 - 18	312 kg/km (209 lb/1000 ft)	19.9 mm (0.78 in)	299 mm (11.8 in)	199 mm (7.8 in)
288	24	24	384 kg/km (257 lb/1000 ft)	22.2 mm (0.87 in)	333 mm (13.1 in)	222 mm (8.7 in)

Chemical Characteristics	
RoHS	Free of hazardous substances according to RoHS 2002/95/EG

Transmission Performance

Multimode				
Fiber Core Diameter (µm)	62.5	50	50	50
Fiber Category	OM1	OM2	OM3	OM4
Fiber Code	K	T	T	T
Performance Option Code	30	31	80	90
Wavelengths (nm)	850/1300	850/1300	850/1300	850/1300
Maximum Attenuation (dB/km)	3.4/1.0	3.0/1.0	3.0/1.0	3.0/1.0
Serial 1 Gigabit Ethernet (m)	300/550	750/500	1000/600	1100/600
Serial 10 Gigabit Ethernet (m)	33/-	150/-	300/-	550/-
Min. Overfilled Launch (OFL) Bandwidth (MHz*km)	200/500	700/500	1500/500	3500/500
Minimum Effective Modal Bandwidth (EMB) (MHz*km)	220/-	950/-	2000/-	4700/-

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Single-mode					
Fiber Name	SMF-28e+® fiber	SMF-28e+® fiber	SMF-28e+® LL	SMF-28® Ultra**	ClearCurve® XB**
Fiber Category	G.652.D	G.652.D	G.652.D	G.652.D/G.657.A1	G.652.D/G.657.A1
Fiber Code	E	E	L	Z	H
Performance Option Code	00	01	22	22	01
Wavelengths (nm)	1310/1383/1550	1310/1383/1550	1310/1383/1550	1310/1383/1550	1310/1383/1550
Maximum Attenuation (dB/km)	0.35/0.35/0.25	0.4/0.4/0.3	0.34/0.34/0.22	0.34/0.34/0.22	0.4/0.4/0.3
Typical Attenuation* (dB/km)	0.33/0.33/0.19	0.33/0.33/0.19	0.32/0.32/0.18	0.32/0.32/0.18	0.35/0.35/0.20

Fiber Name	SMF-28® ULL	LEAF®	
Fiber Category	G.652	G.655	
Fiber Code	P	F	
Performance Option Code	19	01	
Wavelengths (nm)	1310/1383/1550	1310/1383/1550	
Maximum Attenuation (dB/km)	0.33/-/0.19	-/-/0.25	
Typical Attenuation* (dB/km)	0.31/-/0.17	-/-/0.19	

** Typical attenuation values match the attenuation values listed in the optical fiber specifications. See **www.corning.com/opticalfiber** for Corning optical fiber specifications. Better attenuation performance options are available for some fiber and cable types. Contact Customer Care for additional fiber options.*
** * SMF-28® Ultra and ClearCurve® XB fiber deliver up to 10x better macrobend loss performance compared to the G.652.D standard and up to 33 percent better macrobend loss performance than the G.657.A1 standard for 10mm radii bends.*

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Ordering Information | *Note: Contact Customer Care at 1-800-743-2675 for other options.*

☐ ☐ ☐	☐	U	5	-	☐	☐	1	☐	☐	D	2	0
1	2	3	4		5	6	7	8		9	10	

1 Select fiber count.
Standard offerings:
012-288 (Increments of 12)

2 Select fiber code.
K = 62.5 µm multimode (OM1)
T = 50 µm multimode (OM2/OM3/OM4)
E = Single-mode (G.652.D) SMF-28e+® fiber
L = Single-mode (G.652.D) SMF-28e+® LL fiber
Z = Single-mode (G.652.D/G.657.A1) SMF-28® Ultra fiber
H = Single-mode (G.652.D/G.657.A1) ClearCurve® XB fiber
P = Single-mode (G.652) SMF-28® ULL fiber
F = Single-mode (G.655) LEAF® fiber

3 Defines cable type.
U = ALTOS® Loose Tube Cable with 2.5 mm buffer tubes

4 Defines outer jacket.
5 = Double-jacket, single-armored

5 Select fiber placement.
T = 12 fibers/buffer tube (standard)
6 = 6 fibers/buffer tube
See Note 1.

6 Select length markings.
3 = Markings in meters
4 = Markings in feet (standard)

7 Defines tensile strength.
1 = 2700 N/600 lbf (standard)

8 Select performance option code.
30 = 62.5 µm multimode (OM1)
31 = 50 µm multimode(OM2)
80 = 50 µm multimode (OM3)
90 = 50 µm multimode (OM4)
01 = Single-mode (OS2)
(Max. attenuation 0.4/0.4/0.3 dB/km)
00 = Single-mode (OS2)
(Max. attenuation 0.35/0.35/0.25 dB/km)
22 = Single-mode (OS2)
(Max. attenuation 0.34/0.34/0.22 dB/km)
19 = Single-mode (Ultra Low-Loss)
(Max. attenuation 0.33/–/0.19 dB/km)
01 = Single-mode NZDSF*
(Max. attenuation –/–/0.25 dB/km)
**Non-Zero Dispersion-Shifted Single-mode Fiber*

9 Defines cable type.
D = ALTOS® Gel-Free Cable

10 Defines special requirements.
20 = No special requirements

1) Cable outer diameter may change. Example: 48 F cable with 6 fibers per tube will require 8 active buffer and have an OD like a standard 96 F cable.

RoHS COMPLIANT

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